IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

	§	
	§	
WSOU INVESTMENTS, LLC d/b/a, BRAZOS LICENSING AND DEVELOPMENT	§	
	§	
	§	**Civil Case No. 6:20-cv-574-ADA**
	§	**Civil Case No. 6:20-cv-576-ADA**
***Plaintiff*,**	§	**Civil Case No. 6:20-cv-579-ADA**
v.	§	**Civil Case No. 6:20-cv-580-ADA**
	§	
GOOGLE LLC,	§	**JURY TRIAL DEMANDED**
	§	
Defendant.	§	
	§	

GOOGLE'S RESPONSIVE CLAIM CONSTRUCTION BRIEF

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TABLE OF ABBREVIATIONS

Abbreviation	Description
WSOU	Plaintiff WSOU Investments, LLC d/b/a Brazos License and Development
Google	Defendant Google LLC
'491 patent	U.S. Patent No. 7,946,491
'180 patent	U.S. Patent No. 8,640,180
'045 patent	U.S. Patent No. 8,965,045
'283 Patent	U.S. Patent No. 8,595,283
Group 2 Patents	Collectively, U.S. Patent Nos. 7,946,491; 8,640,180; 8,965,045; and 8,595,283
POSITA	Person Of Ordinary Skill In The Art

* ***Emphasis added unless indicated otherwise***

***** For the Court's convenience, Google cites to WSOU's opening brief by referring to the brief filed in Case No. 6:20-cv-574-ADA (which is the same for all of the above-captioned cases) and to the pagination generated by CM/ECF (at the top of the page) rather than the pagination at the bottom of the page.***

I. U.S. PATENT NO. 7,946,491 (CASE NO. 6:20-CV-580-ADA)

The '491 patent (Ex. 1) generally describes a "camera barcode reader having automatic localization, detection of orientation, and type classification." (*Id.* at 2:26-28.)

A. "the input image" (claims 1, 13, 25, and 41)

Google's Construction	WSOU's Construction
the original input image	plain and ordinary meaning

This term presents a straightforward question under the canons of claim construction: when a claim includes first "an input image" and then "the input image," do later references to "the input image" refer to the antecedent "an input image" (as Google contends), or do they refer (as WSOU contends) to some *other* image not previously seen in the claim? Although Court construction would not normally be necessary to confirm that "the input image" refers to the antecedent "an input image," it is necessary here, because WSOU argues that "input image" has different meanings in different parts of the claim, sometimes meaning the "image" actually "input" into the claimed system or method, and sometimes meaning something else. (Dkt. 33 at 8.)[1] Thus "reliance on a term's 'ordinary' meaning does not resolve the parties' dispute," *O2 Micro Int'l Ltd. v. Beyond Innovation Techs. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008), and the Court should resolve the dispute between Google, which seeks to confirm that "the input image" refers to the antecedent "an input image," and WSOU, which seeks the opposite.

Black-letter law confirms that Google is correct. Courts have long held that "a claim term should be construed consistently with its appearance in other places in the same claim or in

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other claims of the same patent." *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001) (collecting cases). Following this rule, when a claim includes 'an X' followed by 'the X,' courts consistently find that 'an X' provides antecedent basis for 'the X,' and both terms refer to the same X. *See, e.g., In re Fought*, 941 F.3d 1175, 1178 (Fed. Cir. 2019) ("a travel trailer" and "the travel trailer"); *Pacing Techs., LLC v. Garmin Int'l, Inc.*, 778 F.3d 1021, 1024 (Fed. Cir. 2015) ("a repetitive motion pacing system" and "the repetitive motion pacing system"); *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1356-57 (Fed. Cir. 1999) ("a discharge rate" and "the discharge rate"). WSOU's construction contradicts the words of the claims, which follow the well-trod path of "an X" followed by "the X," each referring to the same X. *See id.*

WSOU's construction, unlike Google's, would also deprive "the input image" of antecedent basis. *See Process Control*, 190 F.3d at 1356-57 (because "the discharge rate" refers to earlier "a discharge rate," the construction "avoids any lack of antecedent basis problem for the occurrence of 'the discharge rate' in clause [d]"); *compare Digital Retail Apps, Inc. v. H-E-B, LP*, Case No. 19-167, 2020 WL 376664, at *8 (W.D. Tex. Jan. 23, 2020) (finding "a consumer" and "a retailer" provide antecedent basis for later "the consumer" and "the retailer") *with id.* at *10 n.7 (finding no antecedent basis for "the purchase information," thus "rendering those claims invalid"). WSOU does not explain how it can avoid this problem; it cannot.

Finally, WSOU's construction would read out the word "input," which modifies every instance of "image" in the claims, confirming that the "input image" is an "image" that is "input" into the claimed system or method, and not a product of it. Again, the canons of claim construction do not allow WSOU's proposal. "Each element contained in a patent claim is deemed material to defining the scope of the patented invention." *Warner-Jenkinson Co., Inc. v.*

Hilton Davis Chem. Co., 520 U.S. 17, 29 (1997). "Consistent with this philosophy," courts have repeatedly rejected constructions "contrary to the principle that claim language should not [be] treated as meaningless." *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 951 (Fed. Cir. 2006); *see, e.g.*, *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."). As WSOU admits regarding the '728 patent, "interpretations that render some portion of the claim language superfluous are disfavored." (Case No. 6:20-cv-583-ADA, Dkt. 35 at 10 (quoting *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed. Cir. 2004))); *see, e.g.*, *Qcue, Inc. v. Digonex Techs., Inc.*, Case No. 12-484, 2013 WL 4784120, at *4 (W.D. Tex. Sept. 5, 2013) ("[P]roposed construction would impermissibly read 'pricing' out of the claim.").

B. "performing a correction on the input image" (claims 1, 13, 25, and 41)

Google's Construction	WSOU's Construction
correcting the content of the original input image	plain and ordinary meaning

Google's construction of "performing a correction on the input image" gives effect to the patentee's own construction of this term during prosecution, which it used to overcome the prior art. WSOU may not rely on "plain and ordinary meaning" in view of the prosecution history, including, critically, that the applicants responded to rejections over prior art first by adding "performing a correction on the input image" to the independent claims, and then by explaining that "performing a correction on the input image" requires not just any correction, but a correction to the content of the input image—the construction Google seeks here.

On March 24, 2010, the examiner issued a non-final rejection of all claims in light of U.S. Patent App. No. 2005/0103858 ("Zhu"). (Ex. 2.) On June 24, 2010, the applicants

amended the claims "to clarify that the processing includes performing a correction on the input image" and stated that "Zhu fails to teach or suggest that the processing includes performing a correction on the input image." (Ex. 3 at 10-11 (emphasis in original).) On September 14, 2010, the examiner issued a final rejection of all claims in light of Zhu, finding that Zhu did teach "performing a correction on the input image" because "paragraphs [0175], [0183], [0188], [0194] and figure 17A of Zhu discloses the processing of image involve searching for regions of interest, partitioning image and marking the four corners of ROI, etc." (Ex. 4 at 7.) The examiner concluded that, "[a]lthough Zhu does not explicitly teach the exact term of 'correct on the input image', however by performing such processing steps would inherently include correcting of the image for analyzing before decoding the image." (*Id.*)

On December 3, 2010, the applicants filed a Pre-Appeal Brief Request for Review, which argued that Zhu did not inherently teach "performing a correction on the input image," because the activities the examiner identified did not require correction of the *content* of the input image:

> Applicants respectfully submit that the activities described by the Examiner and set forth in the final Office Action quite obviously only at best might possibly involve some form of correction, but clearly do not necessarily or certainly involve some form of correction and therefore there is no inherent correction involved in any of the activities described in the Office Action (or in all of Zhu). Specifically, "searching for a region of interest" clearly could (and likely does) only involve **examination of content to conduct the search without any correction to the content whatsoever**. Similarly, partitioning the image clearly could (and again likely does) only include identifying different portions of the image **without any correction to the content whatsoever**. Additionally, marking the comers of an ROI also clearly could (and likely does) only involve marking points on the image **without any correction to the content whatsoever**. Thus, it is abundantly clear that the allegation that searching for regions of interest, partitioning image and **marking the four corners of ROI would inherently include correcting the image in the manner claimed is erroneous**. Accordingly, the above recited features are not inherent in Zhu.

(Ex. 5 at 4.) Following this brief, the examiner allowed the claims. (Ex. 6.) The applicants thus confirmed that "performing a correction on the input image" requires correcting the *content* of that image, and the examiner relied on this confirmation to allow the claims. (Ex. 5 at 4; Ex. 6.)

WSOU cannot avoid this "clear disavowal of claim scope" during prosecution. *Ancora Techs, Inc. v. LG Elecs. Inc.*, Case No. 20-34, 2020 WL 4825716, at *2 (W.D. Tex. Aug. 19, 2020) (quoting *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012)).

"The public notice function of a patent and its prosecution history requires that a patentee be held to what he declares during the prosecution of his patent. A patentee may not state during prosecution that the claims do not cover a particular device and then change position and later sue a party who makes that same device for infringement." *Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 995 (Fed. Cir. 2003). "Arguments made during the prosecution of a patent application are given the same weight as claim amendments." *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 979 (Fed. Cir. 1999) (citing *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985)); *see also, e.g.*, *Lifestream Diagnostics, Inc. v. Polymer Tech. Sys., Inc.*, 109 F. App'x 411, 414-415 (Fed. Cir. 2004) (finding "argument-based estoppel" where "the patent applicant in our case provided detailed, consistent and repeated arguments distinguishing" the prior art). WSOU cannot avoid the applicants' clear and repeated disavowal of scope beyond "any correction to the content whatsoever," as its claim construction seeks. (*See* Ex. 5 at 4.)

Unable to rebut the prosecution history, WSOU simply ignores it, and instead makes a series of arguments that cannot overcome it. WSOU argues that "Google impermissibly attempts to rewrite" the term (Dkt. 33 at 8), but Google merely seeks to give effect to the applicants' own construction. *See supra*. WSOU argues that Google's construction does not specify whether a "correction must be performed on the *entirety* of 'the content' of the input image," or simply a region of interest (*id.* at 9), but Google's construction again follows the applicants' view that "any correction to the content whatsoever" is sufficient to meet the claim. (Ex. 5 at 4.) Finally,

WSOU argues that "a correction as claimed at least encompasses defining a new region of interest or 'ROI' that better aligns with the corners and borders of an unchanged barcode." (Dkt. 33 at 9 (citing Ex. 1 at 16:45-52, Figs. 4, 5).) But the applicants explicitly disclaimed "marking the corners of an ROI" because it involved only "marking points on the image without any correction to the content whatsoever." (Ex. 5 at 4.) WSOU's arguments do not overcome the applicants' clear disavowal of claim scope; they do not come close.

C. "new frame" (claims 1, 13, 25, and 41)

Google's Construction	WSOU's Construction
indefinite	plain and ordinary meaning

The claims discuss a "new frame" of the input image, but the "input image" described by the patent is static, and thus cannot have a "new frame." The claims are thus indefinite. "A claim, when viewed in light of the intrinsic evidence, must 'inform those skilled in the art about the scope of the invention with reasonable certainty.'" *Flash-Control, LLC v. Intel Corp.*, Case No. 19-1107, 2020 WL 4561591, at *3 (W.D. Tex. July 21, 2020) (quoting *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014)). If it does not, "the claim fails § 112, ¶ 2 and is invalid as indefinite." *Flash-Control*, 2020 WL 4561591, at *3 (citing *Nautilus*, 572 U.S. at 910). In the '491 patent, "new frame" fails this test.

The '491 patent confirms that "the input image" is static. WSOU does not appear to dispute this point, and rightly so: the specification contemplates generating and processing vertical and horizontal histograms (Ex. 1 at 11:24-31), and analyzing those histograms to determine a region of interest (ROI) that might be a barcode (*id.* at 11:31-37), an analysis that works only on a static image. The specification further contemplates binarizing the image, that is, converting it from shades of grey to black and white (*id.* at 14:1-3, 14:13-29), a process which, again, requires a static image. To avoid indefiniteness, then, the patent must explain

"with reasonable certainty" how a static "input image" can have "a new frame." *Flash-Control*, 2020 WL 4561591, at *3. It does not. Indeed, "new frame" largely appears in language that copies the claims, and thus sheds no light on their meaning. (Ex. 1 at 17:53-58.) Only once does "frame" appear in language that does not copy the claims, but that language only deepens the confusion:

> Additionally, each method provides a capability for **sequential frame processing** in which, as described above, a **next sequential frame** may be utilized in connection with the performance of a method if the **current frame** is not successful in providing a decode of the barcode. However, with regard to method switching, method modification, **sequential frame processing**, and ROI correction, each operation may have a corresponding time limit before the operation times out and fails.

(*Id.* at 19:46-54.) Even assuming that the "new frame" in the claims and the "next sequential frame" in this portion of the specification are the same—an assumption not without risk—the specification does not specify the sequence from which "a next sequential frame may be utilized" in "sequential frame processing," and indeed does not include the words "sequential" or "sequence" anywhere else. Nor does it specify where to find the "new frame of the input image," or even how to know what that is. The patent provides "those skilled in the art" with no way to know what it means by "new frame," and thus prevents their knowing "the scope of the invention with reasonable certainty." *Flash-Control*, 2020 WL 4561591, at *3.[2]

[2] WSOU contends, here and elsewhere in boilerplate arguments, that Google provided "insufficient notice" of its indefiniteness arguments, although WSOU admits Google timely disclosed the arguments themselves. WSOU cites no law or order of this Court that it claims Google violated, and never asked Google to cure this alleged "insufficient notice." Nor did WSOU follow the rule it seeks to enforce against Google: it announced a new construction of "means for determining" for the first time in its opening brief. *See infra.* WSOU's baseless claims regarding notice seek to distract the Court from the substance of the arguments before it. The Court should decline this invitation.

D. Disputed Means-Plus-Function Terms

Although the parties contest the scope of fifteen total elements across three claims, independent claims 13, 25 and 41, there are only seven issues before the Court. The parties agree that five elements of claim 41 fall under § 112, ¶ 6, but disagree about the corresponding structure and sometimes the function of these elements. The remaining two issues are whether the corresponding elements of claims 13 and 25, which use identical language except for their openings, also fall under § 112, ¶ 6. (*Compare, e.g.*, claim 41 ("means for processing an input image . . .") *with* claim 13 ("a first executable portion for processing an input image . . .") *and* claim 25 ("computer program code, the memory and the computer program code configured to, with the processor, cause the apparatus at least to process an input image . . .").)[3]

1. "means for processing an input image for an attempt to decode the input image using a current barcode reading method, the processing including performing a correction on the input image" (claim 41)

Google's Construction	WSOU's Construction
This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "processing an input image for an attempt to decode the input image using a current barcode reading method, the processing including performing a correction on the input image" Structure: 9:58 to 11:23, 15:25 to 16:52	This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "processing an input image for an attempt to decode the input image using a current barcode reading method" Structure: Fig. 3, barcode reading element 70 and processing element 72; Fig. 6, block 200; Fig. 7-8; 2:25 to 3:34; 5:35-57; 8:26 to 16:52; 17:8-53; 19:31-60; 20:37-52; 21:38-42; 24:13-14; and equivalents thereof.

[3] WSOU attempts to incorporate by reference "corresponding disclosure in the written description" not cited in its papers. (Dkt. 33 at 15 n.1.) This is improper: WSOU must set forth disclosure of corresponding structure in the specification; the Court needn't search for needles in a haystack. Should WSOU rely on new structure in reply or on appeal, Google will object.

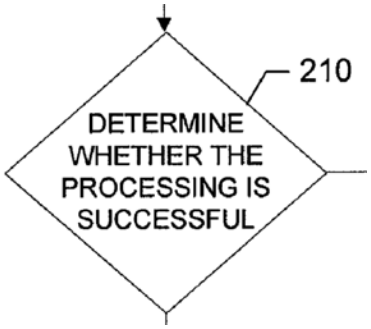
The parties differ on both function and structure. First, WSOU argues that "the processing including performing a correction on the input image" is not function but structure. (Dkt. 33 at 15.) Setting aside the lateness of this argument, made first in its opening brief, WSOU is wrong: by their very language, "processing an input image for an attempt to decode the input image using a current barcode reading method" and "performing a correction on the input image" are separate portions of the function, each of which requires its own structure. The specification includes separate structure for these separate functions: "processing an input image for an attempt to decode the input image using a current barcode reading method" at lines 9:58 to 11:23, and "performing a correction on the input image" at lines 15:25 to 16:52.

The Court should reject WSOU's additional proposed structure. WSOU suggests that dependent claims can provide structure, but that is not so. *See, e.g.*, *InCom Corp. v. Radiant RFID, LLC*, Case No. 17-009, 2018 WL 4690934, at *5 (W.D. Tex. Sept. 28, 2018) (rejecting attempt "to assign definition structure to the 'tag orientation controller' of Claim 16 by referencing the term's use in dependent claims" because "dependent claims, by nature, add limitations not present in the corresponding independent claim."). The rest fares no better: by WSOU's own admission, most of its claimed structure does not address its claimed function of "processing an input image for an attempt to decode the input image using a current barcode reading method," but instead concerns other functions such as "obtaining an input image" or "determining a region of interest." (Dkt. 33 at 16.) Except where they overlap with Google's proposal, the remaining portions of WSOU's proposed structure merely restate the function and thus cannot provide structure. (*Id.*)

2. "means for determining whether the processing of the input image is successful based on a determination as to whether the correction is completed" (claim 41)

Google's Construction	WSOU's Construction
This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "determining whether the processing of the input image is successful based on a determination as to whether the correction is completed" Structure: none (indefinite)	This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "determining whether the processing of the input image is successful based on a determination as to whether the correction is completed" Structure: Fig 3, processing element 72; Fig. 6, operations 210–230; 2:25–3:34; 16:65–17:7; 17:8–53 18:48-60; 19:21–26; 24:16–17; and equivalents thereof.

WSOU's proposed structure merely restates the words of the function, and therefore cannot suffice. WSOU's claimed structure for "determining whether the correction is completed" (*id.* at 16) merely states that "[i]f either ROI correction or geometrical correction are not able to be completed, a switch may be made to the second method" (Ex. 1 at 18:48-52), and does nothing to explain how to *determine* whether a correction was completed, which WSOU agrees is the function of this term. (Dkt. 33 at 16.) Again, WSOU's claimed structure for "determining whether the processing of the input image is successful" merely restates the words of the function, as in Fig. 6 Function 210, or are irrelevant to this "determining" step. (*Id.* at 16-17.) None of the claimed structure does anything to show how to "*determin[e]* whether the processing of the input image is successful," and thus would constitute, if allowed by this Court, purely functional claiming. WSOU lists additional claimed structure in its brief (*id.* at 16), but does not mention it in its arguments (*see id.* at 16-17) and for good reason: it suffers from the same failings.



These failures are fatal. *See, e.g.*, *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1316-17 (Fed. Cir. 2012) ("The portions of the specification that describe what occurs inside box 44,

however, merely recite functional, not structural, language. This type of purely functional language, which simply restates the function associated with the means-plus-function limitation, is insufficient to provide the required corresponding structure."). The disclosed structure must be "the special purpose computer programmed to perform the disclosed algorithm." *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). It is "well settled that simply disclosing software [ ] without providing some detail about the means to accomplish the function is not enough." *Functional Media, L.L.C. v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed Cir. 2013).

3. "means for switching to one of a different barcode reading method or processing a new frame of the input image using the current barcode reading method in response to the processing of the input image being unsuccessful" (claim 41)

Google's Construction	WSOU's Construction
This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "switching to one of a different barcode reading method or processing a new frame of the input image using the current barcode reading method in response to the processing of the input image being unsuccessful" Structure: none (indefinite)	This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "switching to one of a different barcode reading method or processing a new frame of the input image using the current barcode reading method in response to the processing of the input image being unsuccessful" Structure: Fig. 3, processing element 72; Fig. 6–8, blocks 260 and 270; 2:25–3:34; 14:3–12; 16:53–17:53; 18:48–52; 19:21–60; 20:53–56; 21:3–5; and equivalents thereof.

Again, WSOU's proposed structure merely restates the words of the function, and therefore cannot suffice. WSOU's claimed structure for "means for switching" is "processing element 72," which the specification explains is just a general purpose computer. (*See, e.g.*, Ex. 1 at 9:30-35 ("The processing element 72 may be embodied in many ways. For example, the processing element 72 may be embodied as a processor, a coprocessor, a controller or various

other processing means or devices including integrated circuits such as, for example, an ASIC (application specific integrated circuit.").) This cannot suffice. *See, e.g.*, *Functional Media*, 708 F.3d at 1318; *Noah Sys.*, 675 F.3d at 1316-17; *WMS Gaming*, 184 F.3d at 1349.

WSOU refers to various aspects of the specification, but does not assemble them into an algorithm that provides structure for the claim. (Dkt. 33 at 18.) Indeed, each of WSOU's additional references does not even provide an algorithm on its own terms. WSOU claims structure for "determining an attempt to detect a barcode is unsuccessful" (*id.* at 19) in an excerpt that mentions the possibility that "the barcode reader element 70 is unable to decode the barcode," but which does nothing to provide an algorithm for "determining" whether that has occurred. (Ex. 1 at 14:3-12.) Similarly, WSOU refers to "modifying the current barcode reading method by switching from a global binarization to an adaptive binarization" and "in response to determining a new frame is available, restarting ROI correction using the new frame and the same ROI under the current barcode reading method," but refers to specification sections that provide nothing beyond those words. (Dkt. 33 at 19.) WSOU lists additional claimed structure in its brief (*id.* at 18), but does not mention it in its arguments (*see id.* at 18-19) and for good reason: it suffers from the same failings.

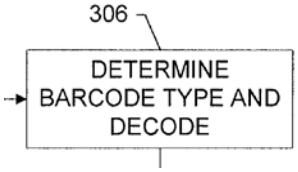
4. "means for attempting a decode of the input image using the current barcode reading method in response to the processing of the input image being successful" (claim 41)

Google's Construction	WSOU's Construction
This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "attempting a decode of the input image using the current barcode reading method in response to the processing of the input image being successful" Structure: none (indefinite)	This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "attempting a decode of the input image using the current barcode reading method in response to the processing of the input image being successful"

	Structure: Fig. 3, barcode reading element 70 and processing element 72; Fig. 6, block 220; Figs. 7–8; 2:25–3:34; 9:45–47; 13:33–62; 17:8–53; 18:26–62; 19:31–60; and equivalents thereof.

Again, WSOU's proposed structure merely restates the words of the function, and therefore cannot suffice. *See, e.g.*, *Functional Media*, 708 F.3d at 1318; *Noah Sys.*, 675 F.3d at 1316-17; *WMS Gaming*, 184 F.3d at 1349. WSOU finds structure for "attempting a decode of the input image using the current barcode reading method" in "determining whether a barcode is one-dimensional ('1D') or two-dimensional ('2D')" and "determining a barcode type" (Dkt. 33 at 20 (citing Ex. 1 at 9:45-47, 18:23-26)), but neither of these portions of the specification describe "attempting a decode of the input image using the current barcode reading method"—to the contrary, they both describe *selecting* a *new* barcode reading method," which necessarily occurs *before* attempting a decode using that barcode reading method, and which cannot occur when there is *already* a "current barcode reading method" and thus no need to select a new one.

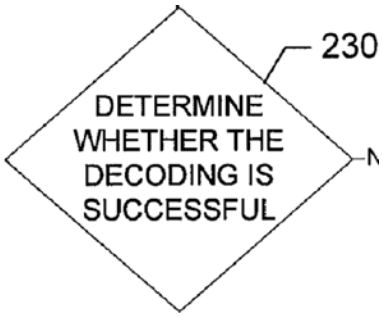
Finally, WSOU claims to find structure for "attempting a decode of the barcode in accordance with its determined characteristic(s)" in "Fig. 7, operation 306; Fig. 8, operations 408 and 420; 18:26-27." (*Id.*) But those two lines state that "[a]t operation 306, if the barcode is a 1D barcode, the 1D barcode type is determined and the barcode is decoded," thus providing no structure for "attempting a decode" and confirming that they are not "using the current barcode reading method" in any event. And operations 306, 408 and 420 all state only "determine barcode type and decode," or merely "attempt decode." They cannot provide structure; nor does the additional alleged structure WSOU notes in its brief (*id.* at 19), but does not mention it in its arguments (*see id.* at 19-20).



5. "means for performing a switch to the different barcode reading method in response to a failure of the attempt to decode the input image using the current barcode reading method" (claim 41)

Google's Construction	WSOU's Construction
This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "performing a switch to the different barcode reading method in response to a failure of the attempt to decode the input image using the current barcode reading method" Structure: none (indefinite)	This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "performing a switch to the different barcode reading method in response to a failure of the attempt to decode the input image using the current barcode reading method" Structure: Fig. 3, barcode reading element 70 and processing element 72; Fig. 6, operations 230 and 270; Figs. 7–8; 2:25–3:34; 5:35–57; 8:26–16:6; 16:61–18:10; 18:48–52; 19:31–60; 20:37–52; 21:38–42; and equivalents thereof.

Again, WSOU's proposed structure merely restates the words of the function, and therefore cannot suffice. *See, e.g.*, *Functional Media*, 708 F.3d at 1318; *Noah Sys.*, 675 F.3d at 1316-17; *WMS Gaming*, 184 F.3d at 1349. WSOU begins by referring to "barcode reading element 70 and processing element 72," but these are merely hardware for barcode reading and general computing, and thus cannot provide the algorithm giving structure to the claim. WSOU claims to find structure in "determining a failure of the attempt to decode the input image using the current barcode reading," but the specification portions it cites provide nothing further: at lines 16:61 to 17:1, the specification merely states that switching can occur—function, not structure—and at lines 17:60-62, the specification states only that "[a] determination is made at operation 230 as to whether the decode attempt of operation 220 is successful"—function again, not structure. And operation 230 itself once again restates the function without providing structure. Finally, WSOU claims



structure "in response to determining a failure of the attempt to decode the input image using the current barcode reading method, switching from the current barcode reading method to the different barcode reading method," but this language again is functional, and the citations again provide nothing more. At lines 17:1-7, 17:63 to 18:10, and Fig. 6, operation 270, the specification merely repeats the functional language; Fig. 8 does not talk about switching at all.

6. **Whether the phrase "computer program product comprising at least one computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising: . . . a first/second/third/fourth/ fifth executable portion for . . ." invokes Section 112 ¶ 6 (claim 13)**

7. **Whether the phrase "apparatus comprising a processor and memory including computer program code, the memory and the computer program code configured to, with the processor, cause the apparatus at least to: . . ." invokes Section 112 ¶ 6 (claim 25)**

Google's Construction	WSOU's Construction
For disputed means-plus-function term nos. 6 and 7: the recited functions are identical to the means-plus-function terms in claim 41, thus the only issue is whether this term invokes Section 112 ¶ 6.	For disputed means-plus-function term nos. 6 and 7: plain and ordinary meaning; does not invoke 35 U.S.C. § 112, ¶ 6; definite.

Claims 13 and 25 are largely identical to "means for" claim 41, with only different preambles to the five elements. (*Compare* Ex. 1 at 24:10-28 *with id.* at 21:7-30 *and id.* at 22:8-28.) Each preamble for claims 13 and 25 "does not provide any indication of structure because it sets forth the same black box recitation of structure for providing the same specified function as if the term 'means' had been used." *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015); *see, e.g.*, *MTD Prod. Inc. v. Iancu*, 933 F.3d 1336, 1343 (Fed. Cir. 2019) (finding "mechanical control assembly" to be a nonce term). Applying this law, this Court in *Dyfan, LLC v. Target Corp.*, found that terms reciting "code" or "system," even coupled with recitations such as "broadcast short-range communications unit," "mobile devices,"

"application," and "server," are subject to § 112, ¶ 6." Case No. 19-179, Docket No. 57 at 19-25 (Nov. 24, 2020). The Court further explained that plaintiff could not combine nonce words to avoid means-plus-function treatment: "Were the Court to consider 'mobile device' to be sufficient structure for 'code,' then an applicant could simply recite two nonce words—'processor' and 'code'—together in the claim in order to essentially write the claim in means-plus-function format without being subject to § 112, ¶ 6." *Id.* at 20 n.4.

Dyfan controls here. Although they contain more words than the terms in *Dyfan*, the preambles here contain no more substance, and WSOU cannot avoid § 112, ¶ 6 by reciting "computer program product comprising at least one computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising" (claim 13) or "apparatus comprising a processor and memory including computer program code, the memory and the computer program code configured to, with the processor, cause the apparatus at least to" (claim 25) any more than Dyfan could avoid § 112, ¶ 6 by reciting "mobile device" and "code." Each term "is defined only by the function that it performs," *Dyfan*, slip op. at 20 (citing *Cypress Lake Software, Inc. v. Samsung Elec. Am. Inc.*, 382 F. Supp. 3d 586, 615 (E.D. Tex. May 10, 2019), and "[a]lthough the claim recites several components . . . none of these components constitute sufficient structure to perform the recited function." *Dyfan*, slip op. at 20; *see also* Manual of Patent Examining Procedure, § 2181 (Rev. Oct. 2019), available at https://www.uspto.gov/web/offices/pac/mpep/s2181.html.

WSOU argues that "if one claim element in a patent expressly recites a means-plus-function element by using the terms 'means for' and another claim element does not, this indicates that the applicant knew how to claim a means-plus-function element." (Dkt. 33 at 11.) WSOU thus argues that the inventor's intent can avoid means-plus-function treatment, but the

"the Federal Circuit rejected this argument by holding that the 'inventor's subjective intent is irrelevant to the issue of claim construction.'" *Dyfan*, slip op. at 17-18 (quoting *Howmedica Osteonics Corp. v. Wright Med. Tech., Inc.*, 540 F.3d 1337, 1347 (Fed. Cir. 2008)). As the Court ruled in *Dyfan*, the relevant test is not the inventor's intent but whether a term "does not connote sufficient structure to a person of ordinary skill in the art to avoid 112 ¶ 6 treatment." *Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006). WSOU cites one case to support its argument that the relevant test is the inventor's intent, *Al-Site Corp. v. VSI Intern., Inc.*, 174 F.3d 1308, 1318-19 (Fed. Cir. 1999), but that case says no such thing.

WSOU next argues that, regardless of the inventor's intent, claim differentiation prevents means-plus-function treatment because claim 41 uses "means for" and claims 13 and 25 do not. (Dkt. 33 at 12.) Again, this argument cannot survive this Court's ruling in *Dyfan*, which found claims using different nonce words fell under § 112, ¶ 6, and thus failed as indefinite. *E.g.*, slip op. at 19-21. And correctly so: "claims that are written in different words may ultimately cover substantially the same subject matter," *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d, 1473, 1480 (Fed. Cir. 1998), and "the doctrine of claim differentiation cannot override 35 U.S.C. § 112, ¶ 6, which limits the scope of means plus function claims to the corresponding structure, material or acts described in the specification and equivalents thereof." *Trinity Indus., Inc. v. Road Sys., Inc.*, 121 F. Supp. 2d 1028, 1039 (E.D. Tex. 2000) (citing *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1364 (Fed. Cir. 1998)). WSOU's argument would give patentees a free pass to avoid § 112, ¶ 6, perversely by *including* an explicit "means for" claims as well as other claims such as Claims 13 and 25, and then arguing that the existence of the former prevents means-plus-function treatment of the latter. The law does not, and should not, allow for such shenanigans. Similarly, WSOU claims that *Beauregard* claims are immune from § 112, ¶ 6.

(Dkt. 33 at 13-14.) WSOU cites a single case, *Collaborative Agreements, LLC v. Adobe Sys. Inc.*, Case No. 14-356, 2015 WL 2250391 (W.D. Tex. May 12, 2015), but that case applies the *usual 112, ¶ 6 analysis* to its claims, which it would not do if, as WSOU now contends, *Beauregard* claims are immune. 2015 WL 2250391, at *12-*14. Applying that same analysis, this Court in *Dyfan* gave means-plus-function treatment to *Beauregard* claims. *Dyfan*, slip op. at 6. The same analysis applies here.

Exhausting its attempts to avoid the *Williamson* analysis, WSOU finally argues that claims 13 and 25 are not means-plus-function terms because the preambles are not subject to 112, ¶ 6. But WSOU fails to explain how the "computer program product comprising at least one computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising" (claim 13) and "apparatus comprising a processor and memory including computer program code, the memory and the computer program code configured to, with the processor, cause the apparatus at least to" (claim 25) are anything but generic. WSOU cites *Zeroclick, LLC v. Apple Inc.*, which found that terms used in that patent were "used not as generic terms or black box recitations of structure or abstractions, but rather as specific references to conventional graphical user interface programs or code, existing in prior art at the time of the inventions." 891 F.3d 1003, 1008 (Fed. Cir. 2018). But *Zeroclick* did not provide a get-out-of-112-free card to patentees reciting "program" or "code" in their claims, but applied the usual 112, ¶ 6 analysis. *Zeroclick* cannot help WSOU avoid means-plus-function treatment here, where the claims require the "program" and "code" to perform a multitude of functions. *See, e.g., Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1372 (Fed. Cir. 2015) (applying Section 112, ¶ 6 because "the claims simply state that the 'compliance mechanism' can perform various functions").

WSOU also cites *Crossroads Sys. (Texas), Inc. v. Chaparral Network Storage, Inc.*, Case No. 00-217, 2000 WL 35731852, at *4 (W.D. Tex. July 27, 2000), which found that the term "'supervisor unit' is not purely functional, but refers instead to a device that can perform the tasks specifically listed in the claim language." But the specification confirms that the preambles contain merely black-box recitations couched in baroque language. (*E.g.*, Ex. 1 at 19:61 to 20:5 ("[A]ny suitable means for carrying out each of the functions described above may be employed to carry out embodiments of the invention. In one embodiment, all or a portion of the elements of the invention generally operate under control of a computer program product. The computer program product for performing the methods of embodiments of the invention includes a computer-readable storage medium, such as the non-volatile storage medium, and computer-readable program code portions, **such as a series of computer instructions**, embodied in the computer-readable storage medium.").) *See supra.* Like *Zeroclick*, *Crossroads* supports Google's view, not WSOU's, of these claims. Finally, WSOU cites *Collaborative Agreements*, 2015 WL 2250391, at *12-*14, but *Collaborative Agreements* found structure because the terms "refer[red] to a portion of a larger program that, similar to a module, has a specific purpose or performs a specific class of operations." *Id.* Claims 13 and 25 do not; under this Court's decision in *Dyfan*, they must be means-plus-function claims.

II. U.S. PATENT NO. 8,595,283 (CASE NO. 6:20-CV-576-ADA)

The '283 patent is directed to content transfer systems and methods where a receptor device (*e.g.*, a PDA) monitors its activity or usage to determine or predict a period of device activity during which content (*e.g.*, text information from a television signal) should be transferred from a content provider device to the receptor device. (Ex. 7 at Abstract.)

A. "the selected item of content" (claims 1, 2, 3, 10, 21)

Google's Construction	WSOU's Construction
the item of content selected for transfer by the user via the user interface	plain and ordinary meaning

Google's construction clarifies the term's antecedent basis based on a plain reading of the claim language. WSOU generally agrees, acknowledging that the term "derives its antecedent basis from the recitation, 'allow[ing] a user to select an item of content'" (Dkt. 33 at 25), but omits the requirement that the user select the item of content "via a user interface." (Ex. 7 at 15:59-60 (claim 1), 16:45-46 (claim 10), 18:17-18 (claim 21).) If WSOU agrees that this term derives its antecedent basis from the term "*a user interface configured to* allow a user to select an item of content" in claim 1, and from the term "allowing a user to select an item of content *via a user interface*" in claims 10 and 21, then Google agrees no construction is necessary.

B. "monitoring usage of one or more components . . . over a particular time duration" (claims 1, 10)

Google's Construction	WSOU's Construction
monitoring the use of one or more components . . . throughout a limited, noninstantaneous period of time	plain and ordinary meaning

Google's proposed construction clarifies that the claimed monitoring must occur throughout a limited period that is not instantaneous because that is consistent with both the language of the claim and how the applicant itself interpreted it during prosecution. A proper construction of the claim must necessarily take into account the extensive prosecution history, amendments, and arguments made by the applicant before the claims where allowed. *See Personalized Media Commc'ns v. Apple Inc.*, 952 F.3d 1336, 1340 (Fed. Cir. 2020) ("[A]n applicant's amendment accompanied by explanatory remarks can define a claim term by demonstrating what the applicant meant by the amendment.").

The phrase "over [a] particular time duration" itself supports Google's construction and the patentee expressly affirmed during prosecution that "particular time duration" refers to a clearly defined period of time that is more than just an instant. The Examiner rejected claims as anticipated by prior art references "Kim et al.," "Roberts," and "Horvitz," explaining that Kim et al. and Roberts disclose monitoring component usage "over a particular time *duration*" and that Horvitz discloses whether "a sufficient *duration* of an acceptable level of device activity is available for the transfer of the content." (Ex. 8 at 4-7; Ex. 9 at 5,7-10.) To overcome these prior art references, the applicant argued to the Examiner and to the Patent Trial Appeal Board ("PTAB") that Kim et al., Horvitz, and Roberts do not disclose these limitations.

Specifically, the applicant explained that "***Kim et al. only consider instantaneous usage*** and do not consider when usage is 'below a particular threshold level over a particular time duration'." (Ex. 10 at 10.) The applicant also explained that in contrast to monitoring usage over a particular time duration, "Roberts monitors a level of actual bandwidth and compares it to a threshold, ***but only at instances of time and not 'over a particular time duration***.'" (Ex. 11 at 5; *see also* Ex. 12 at 31 (applicant arguing that Roberts "detects when the actual usage ***falls below a threshold level***" which "is the ***trigger*** Roberts uses for determining when to initiate the download.").) The applicant added that "***Roberts does not limit the monitoring*** of the level of actual network utilization ***to any period of time*** whatsoever. It appears that the monitoring of Roberts is ongoing." (Ex. 13 at 6.) According to the applicant, "[s]ince ***Roberts does not appear to disclose limiting the period of monitoring***, it is clear that Roberts does not disclose or suggest" the claim limitations requiring monitoring usage "over a particular time duration." (*Id.*) The applicant also argued that "Horvitz does not disclose or suggest any operation with respect

to 'a sufficient *duration* of an acceptable level of device activity.' At most, Horvitz can be seen to disclose assessing available network capacity ***at a single instance of time***." (*Id.* at 4.)

The specification is consistent with the applicant's arguments to the Examiner and the PTAB, and with Google's proposed construction. For example, the specification explains that a controller can monitor the usage of a receptor device "for two hours", "a few weeks or months", "an hour, a day, a week or a month" which are all limited, noninstantaneous periods of time. (Ex. 7 at 7:58-8:1, 10:29-32.) Further, extrinsic evidence corroborates Google's construction. (Ex. 14 (defining "duration" as the "length of time for which something continues"); Ex. 15 (defining "duration" as "[l]asting, continuance in time; the continuance or length of time; the time during which a thing, action, or state continues"); Ex. 16 (defining "duration" as "the quality or state of lasting for a period of time" and "a portion of time which is measurable or during which something exists, lasts, or is in progress.").) The Court should therefore adopt Google's construction.

WSOU's arguments that Google's proposed construction "should be rejected for improperly importing limitations" and that "[i]t is unclear the effect of the limitations of 'limited' and 'non-instantaneous' in Google's proposed construction" are unsupported. (Dkt. 33 at 27.) Google's construction uses the applicant's own words from the prosecution history. The Federal Circuit has repeatedly explained that "[a]rguments and amendments made during the prosecution of a patent application and other aspects of the prosecution history, as well as the specification and other claims, must be examined to determine the meaning of terms in the claims." *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1326 (Fed. Cir. 2002) (quoting *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995)). That is precisely what Google has done—proposed a construction that gives meaning to the "terse claim language in order to

understand and explain" the scope of the claims in a manner consistent with the applicants' own words. *See Terlep v Brinkman Corp.* 418 F.3d 1379, 1382 (Fed. Cir. 2005).

C. "an acceptable level of device activity" (claim 21)

Google's Construction	WSOU's Construction
indefinite	plain and ordinary meaning

This term is indefinite. "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus*, 572 U.S. at 901. The purpose of the definiteness requirement is "to afford clear notice of what is claimed, thereby 'appris[ing] the public of what is still open to them.'" *Id.* at 909. "A term of degree fails to provide sufficient notice of its scope if it depends on the unpredictable vagaries of any one person's opinion." *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014); *see Biosig Instruments, Inc.*, 783 F.3d at 1378 (A patent must provide "some standard for measuring" a term of degree, to "provide[] enough certainty to one of skill in the art when read in context of the invention."); *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1364 (Fed. Cir. 2018) ("Our case law is clear that the objective boundaries requirement applies to terms of degree."). "Likewise, when a subjective term is used in a claim, 'the court must determine whether the patent's specification supplies some standard for measuring the scope of the [term].'" *Clear Imaging Research, LLC v. Samsung Elecs. Co., Ltd.*, Case No. 2:19-cv-00326-JRG, 2020 WL 6384731, at *7 (E.D.Tex. Oct. 30, 2020) (quoting *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1351 (Fed. Cir. 2005)). Here, "an acceptable level of device activity" is indefinite because "acceptable" is a subjective term and the '283 patent fails to provide an objective standard for measuring the scope of what is "acceptable." Is it a matter of degree? Quality? Result? The patent simply does not teach.

Claim 21 is devoid of any guidance for determining what is "an acceptable level of device activity." Although WSOU argues that the term should be given its plain and ordinary meaning, that result is unsupported by the specification. In particular, the specification—including the portions that WSOU relies on—uses multiple non-limiting, subjective ways of determining an "acceptable" level of device activity, which is insufficient to enable a POSITA to infer the bounds of what is "acceptable." *See, e.g.*, *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1342-45 (Fed. Cir. 2015) (affirming that "molecular weight" was indefinite because the intrinsic record failed to indicate which of the three ways of measuring it was covered by the claims); *Infinity Computer Products, Inc. v. Oki Data Americas, Inc.*, 2021 WL 476067, at *5-7 (Fed. Cir. 2021) (affirming that "passive link" and "computer" were indefinite because "the intrinsic evidence leaves an ordinarily skilled artisan without reasonable certainty" about their scope).

First, contrary to WSOU's assertion, neither Claim 21 nor the specification limits "an acceptable level of device activity" to "low" device activity levels. (Dkt. 33 at 26.) Rather, a "low" activity level is just one non-limiting example of an "acceptable" level, which is evident from the applicant's use of modal verbs to describe what may be "acceptable." (Ex. 7 at 3:1-4 ("[I]t would be advantageous to configure the devices to suspend the transfer of the item of content until a period of acceptable device activity, ***such as*** *low content receptor device activity*"), 3:23-24 ("The acceptable level of activity ***may*** *be low device activity*.").) These non-limiting examples do not define the bounds of the disputed term. *IQASR LLC v. Wendt Corp.*, 825 Fed.Appx. 900, 906 (Fed. Cir. 2020) (emphasizing that "non-limiting examples do not on their own expressly define the bounds—the limits—of the claim"). Moreover, "[a] patentee cannot simultaneously use non-modal verbs to avoid limiting the scope of an invention while

also arguing that those same examples define the limits of the invention." *Id.* "This is especially true when the non-limiting examples include both possibilities of a binary property." *Id.* Such is the case here, where the applicant's use of the word "may" suggests that although an "acceptable" level of device activity *may* be "low," it also may not be "low." (*Id.*)

Second, WSOU's argument merely exchanges one subjective term of degree ("acceptable") for another ("low"). Even if the patent limited "acceptable" levels of device activity to "low" levels of device activity, which it does not, the disputed term would still be indefinite because a "low" level of device activity is subject to multiple subjective interpretations. The specification discusses "low" in terms of both the absolute level of device activity and the nature of that activity, but fails to provide any objective criteria, parameters or ranges to help a POSITA assess either. For example, the specification states that a "low" level of device activity can be determined by comparing a component's usage to a "threshold." (Ex. 7 at 10:14-17.) ("A measure of the usage of the or each component is then compared to a threshold, and a *low level of device usage* is determined when the *threshold is not exceeded*.") But the intrinsic record provides no objective criteria for determining the "threshold" that is used for this comparison. The only "threshold levels of device activity" mentioned in the specification are "*high, moderate, low or some or no level of device activity*." (Ex. 7 at 1:53-56.) These are all relative, subjective terms and the specification is bereft of any guidance for determining their scope. The specification further describes that, in addition to the amount, the *nature* of the usage can affect whether an activity period is considered "low"—*i.e.*, a "*low activity period* is considered to be present when it is detected that there has been *no component usage at all*, ***except for non-user initiated activity such as the maintenance of network connections***, for a predetermined time." (*Id.* at 10:17-21.) Similarly, "*a period of low activity* is considered to be

present *if the device has not been utilized*, ***other than perhaps by maintaining an IDLE connection with a network***, for two hours, for example." (*Id.* at 7:61-64.) Thus, a determination of whether there is "low" device activity cannot be limited to a threshold comparison or a check to see if there is "no component usage at all," as WSOU suggests. (Dkt. 33 at 26.) Rather, it must also include an analysis of the *type* or *nature* of activity on the device—and the patent leaves a POSITA to guess how to perform that analysis or factor it into a determination of "low" device activity.

Third, according to the specification, an acceptable level of device activity may be determined by the device's user *ad hoc*, whenever it is convenient to the user, which further clouds the scope of what is "acceptable." In fact, the specification explains that even if the device has predetermined a "low" activity time for content transfer, the user "may change the time" or "specify that the pre-determined time is not convenient[.]." (Ex. 7 at 9:50-10:9.) "Thus, the user can program and re-program different times when the transfer of content is convenient." (*Id.* at 10:7-9.) Because a user can unilaterally decide what is "acceptable," the term's scope therefore depends on "the unpredictable vagaries of any one person's opinion," rendering the term indefinite. *Interval Licensing*, 766 F.3d at 1371; *see Versata Software, Inc. v Zoho Corp.*, 213 F. Supp. 3d 829, 835 (W.D. Tex. 2016) (explaining that "[r]eference to undefined [subjective] standards, regardless of whose views might influence the formation of those standards, fails to provide any direction to one skilled in the art attempting to determine the scope of the claimed invention"); *see also KLA-Tencor Corp. v. Xitronix Corp.*, 2011 WL 318123, at *4 (W.D. Tex. 2011).

The Federal Circuit and courts in this District have confronted similarly subjective terms of degree, and held those terms were indefinite because the intrinsic record did not provide any

objective standard for measuring the scope of the terms. *IQASR LLC*, 825 Fed.Appx. 901 (affirming that "magnetic fuzz" and "low susceptance microparticles" are indefinite); *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1363 (Fed. Cir. 2018) ("archive exhibits minimal redundancy" found subjective and indefinite); *Interval Licensing LLC*, 766 F.3d at 1374 ("unobtrusive manner that does not distract a user" found subjective and indefinite); *Cypress Lake Software, Inc. v. Samsung Elec. America Inc.*, 382 F. Supp. 3d 586, 610 (E.D. Tex. 2019) ("more convenient" and "permits a user to conveniently enter" found indefinite); *Vstream Techs., LLC v. PLR Holdings*, LLC, No. 6:15CV974-JRG-JDL, 2016 WL 6211550, at *6-8 (E.D. Tex. Sept. 27, 2016), report and recommendation adopted, No. 6:15-CV-974-JRG-JDL, 2016 WL 6159624 (E.D. Tex. Oct. 24, 2016) ("sufficiently correct" and "not sufficiently correct" found indefinite). This Court should reach the same result, because the intrinsic record for the '283 patent similarly provides insufficient guidance as to the scope of "acceptable level of device activity."

That Federal Circuit's decision in *IQASR* is illustrative. In *IQASR*, the Court held that although the specification supported the plaintiff's statement that "magnetic fuzz" is a type of "low susceptance microparticle," the specification also clouded that statement by describing the term "low susceptance microparticle" capriciously. *IQASR LLC*, 825 Fed.Appx. at 905 (examining the "equivocation and subjectivity" in the patent's description of "low susceptance microparticle"). The Court then reasoned that "[u]ltimately, to discern 'magnetic fuzz,' an artisan has to find the *low susceptance microparticles*, and then identify which low susceptance microparticles are disassociated magnetically active microparticles." *IQASR LLC*, 825 Fed.Appx. at 905. However, "[b]ecause the multiple layers of definitions [of low susceptance microparticles] are all open-ended and non-limiting, a skilled artisan must wade through a

morass of uncertainty and contradiction to get to this point." *Id.* As such, the Court agreed that the lack of a meaningful description of what constitutes "magnetic fuzz" prevents a person skilled in the art from knowing when it is present and how to address it. *Id.* The same result is warranted here.

D. "a content transfer controller configured to determine an acceptable activity period by monitoring usage of the one or more components over a particular time duration, and wherein the content transfer controller is configured to determine that an acceptable activity period is present when the usage of the one or more components is determined to have been below a particular threshold level over the particular time duration" (claim 1)

E. "the content transfer controller being arranged: to initiate transfer of the selected item of content from a content provider device according to the determination of an acceptable activity period, to receive the selected item of content, and to store the received item of content on memory" (claim 1)

Google's Construction	WSOU's Construction
Term D: This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "determine an acceptable activity period by monitoring usage of the one or more components over a particular time duration, and determine that an acceptable activity period is present when the usage of the one or more components is determined to have been below a particular threshold level over the particular time duration" Structure: none (indefinite)	plain and ordinary meaning
Term E: This term is subject to means-plus-function treatment under 35 U.S.C. § 112, ¶ 6. Function: "initiate transfer of the selected item of content from a content provider device according to the determination of an acceptable activity period, receive the selected item of content, and store the received item of content on memory" Structure: none (indefinite)	plain and ordinary meaning

These terms are subject to two disputes. First, whether claim 1's recitation of "a content transfer controller configured to . . ." and "the content transfer controller being arranged: to . . ." perform various functions invokes Section 112, ¶ 6. The second dispute is whether the '283 patent discloses sufficient structure for performing those functions: "determine an acceptable activity period," "initiate transfer of the selected item of content," "receive the selected item of content," and "store the received item of content on memory."

Although absence of the word "means" creates a rebuttable presumption that a claim term is not a means-plus-function limitation, Section 112, ¶ 6 applies when the claim term "fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." *Williamson*, 792 F.3d at 1349. Importantly, "[t]he question is not whether a claim term recites any structure but whether it recites sufficient structure—a claim term is subject to § 112(f) if it recites function without reciting sufficient structure for performing that function." *Egenera, Inc. v. Cisco Sys., Inc.*, 972 F.3d 1367, 1374 (Fed. Cir. 2020). Moreover, "[i]t is not enough that a means-plus-function claim term correspond to every known way of achieving the claimed function; instead, the term must correspond to 'adequate' structure in the specification that a person of ordinary skill in the art would be able to recognize and associate with the corresponding function in the claim." *Synchronoss Techs., Inc. v. Dropbox, Inc.*, Case No. 19-2196, slip op. at 15 (Fed. Cir. 2021). As explained below, neither claim 1 nor the specification discloses sufficient structure for performing the functions recited in the disputed terms.[4] The Court should therefore resolve these disputes in Google's favor.

[4] Google addresses these two claim terms together because (1) they form one complete limitation of claim 1 when combined, and (2) WSOU alleges the same structure "controller 21" for both terms.

WSOU's argument that the recitation of "a content transfer controller configured to …" would connote sufficient structure to a person of ordinary skill in the art is unsupported. (Dkt. 33 at 25.) WSOU has provided no evidence—not even a dictionary definition—to establish that a person of ordinary skill in the art would have been familiar with the term "content transfer controller" or that it had achieved recognition as a noun denoting structure when the '283 patent's application was filed. WSOU also cites cases finding that the word "controller" connotes structure, but those cases are not dispositive here. *See, e.g., MonkeyMedia, Inc. v. Apple, Inc.*, 2013 WL 12076550, at *5 (W.D.Tex. Feb. 22, 2013) ("The mere fact a similar or even identical term has been construed one way in a given patent does not control construction in later suit over an entirely different patent."). The question is whether the claim terms in *this* case recite sufficient structure for performing the claimed functions. They do not.

As an initial matter, the claim language and the specification indicate that the applicant intended for the disputed terms to be treated as means-plus-function terms. The terms "*a content transfer controller configured to . . .* " and "*the content transfer controller being arranged: to . . .*" are drafted in the same format as a traditional means-plus-function term with the phrases "configured to" and "arranged: to" substituted for the phrase "means for." This substitution is evident from the specification of the '283 patent, which does *not* include the term "content transfer controller," but instead repeatedly refers to a "content transfer control *means*" for performing the claimed functions. (Ex. 7 at Abstract ("content transfer control *means*, in the form of a controller 21, is arranged to initiate the transfer of an item of content from the provider device 40 to the receptor device 20.").) Such interchangeable treatment of "controller" and "means" demonstrates that the patent uses the term "as synonyms." *Mass. Inst. of Tech.*, 462 F.3d at 1354.

Next, the claim language that follows "*a content transfer controller configured to . . . "* and *"the content transfer controller being arranged: to . . .*" describes the content transfer controller in terms of what it *does*—i.e., "determine an acceptable activity period," "initiate transfer of the selected item of content," "receive the selected item of content," and "store the received item of content on memory" – but it does not include sufficient structure for performing those functions. Although the claims recite the word "controller," "[t]erms such as 'controller' often connote insufficient structure to take the limitation outside the bounds of Section 112(f)." *InCom Corporation v. Radiant RFID, LLC*, 2018 WL 4690934, at *5 (W.D.Tex. Sept. 28, 2018) (holding that the term "tag orientation controller" failed to recite sufficiently definite structure). Such is the case here, where "content transfer controller" only "refers only to a general category of whatever may perform the specified functions." (*Id.* at *6.)

In particular, the term "content transfer controller" does not appear in the '283 patent's specification, and although the specification discloses a "content transfer control *means*" that is "controller 21," it only refers to them in very general terms. (*See, e.g.*, Ex. 7 at Fig. 1 (item 21 is a box labeled "CPU"), 5:1-2 ("content transfer control means may be in hardware, software or a combination thereof), 6:13-15, (controller 21 "co-ordinates and controls the operation of the other elements of the content receptor device"), 7:48-52, 7:65-67, 8:1-3, 8:44-46, 8:56-63, 9:50-63 (describing controller 21 in functional terms).) In sum, the specification does not provide a detailed description of the structure of "content transfer controller" by name, and it only provides a general, functional description of "content transfer control means" or "controller 21." This lack of structure defeats the presumption. *InCom Corp.*, 2018 WL 4690934, at *5-6; *see MonkeyMedia, Inc.*, 2013 WL 12076550, at *5 (holding that the term "relativity controller" was properly construed as a means-plus-function term where the patent provided no definite structure

for the term and described it functionally). The lack of structure in the specification also renders the disputed terms indefinite. "Under § 112 ¶ 6, a patentee is only entitled to 'corresponding structure ... described in the specification and equivalents thereof,' not any device capable of performing the function." *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1364 (Fed. Cir. 2012); *Synchronoss Techs., Inc.*, Case No. 19-2196, slip op. at 15. As explained above, neither "content transfer controller" nor its constituent term "controller" is a sufficient definite structure to perform the claimed functions.

III. U.S. PATENT NO. 8,640,180 (CASE NO. 6:20-CV-579-ADA)

The '180 patent "relates to an apparatus and method for client-side compositing of video streams." (Ex. 17 at Abstract.) The '180 patent describes a video server that transmits multiplexed data streams over a communication interface to a video display device. (*Id*. at 5:3-8.) Instead of compositing all of the data streams at the video server, the video display device composites and displays at least one of the received media streams according to a compositing-instruction substream, which is generated at the video server. (*Id*. at 5:38-43.) In this way, the video composite may be altered by the user of the display device, "allow[ing] the user to have more control over the displaying of video images on a display screen." (*Id*. at 4:56-67, 8:55-9:2.)

A. "client-side compositing of media streams" (all claims)

Google's Construction	WSOU's Construction
the preamble is limiting	plain and ordinary meaning

The Court should hold that the preamble phrase "client-side compositing of media streams" is a requirement of the claims. Whether a preamble is limiting "can be resolved only on review of the entirety of the patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim." *Corning Glass Works v. Sumitomo Elec. USA, Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). A preamble limits the claim "if it recites

essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim." *Bio-Rad Labs., Inc. v. 10X Genomics Inc.*, 967 F.3d 1353, 1369 (Fed. Cir. 2020). The "preamble may be construed as limiting when it recites particular structure or steps that are highlighted as important by the specification." *Proveris Sci. Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1372 (Fed. Cir. 2014). Both happen in this preamble, and both affect the meaning of the claim.

In *Poly-America, L.P. v. GSE Lining Tech. Inc.*, the Federal Circuit concluded that claims to plastic landfill liners were limited by the preamble phrase "blown-film":

> The specification is replete with references to the invention as a "blown-film" liner, *including the title of the patent itself and the "Summary of the Invention*." The phrase *is used repeatedly* to describe the preferred embodiments, and the entire preamble "blown-film textured liner" is repeated in each of the patent's seven claims. Our analysis shows that the inventor considered that the "blown-film" preamble language represented an important characteristic of the claimed invention. We therefore agree with the district court's conclusion that a "[r]eview of the entirety of the [] patent reveals that the preamble language relating to 'blown-film' does not state a purpose or an intended use of the invention, but rather discloses a fundamental characteristic of the claimed invention that is properly construed as a limitation of the claim itself."

383 F.3d 1303, 1309-10 (Fed. Cir. 2004). Similarly, in *Vizio, Inc. v. ITC*, the court held that the phrase "for decoding" was "properly construed as a claim limitation, and not merely a statement of purpose or intended use for the invention, because 'decoding' *is the essence or a fundamental characteristic of the claimed invention*." 605 F.3d 1330, 1340 (Fed. Cir. 2010); *see Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329, 1333 (Fed. Cir. 2003); *Griffin v. Bertina*, 285 F.3d 1029, 1033 (Fed. Cir. 2002); *Manning v. Paradis*, 296 F.3d 1098, 1103 (Fed. Cir. 2002).

Like in *Poly-America*, the specification of the '180 patent is "replete with references to the invention" in terms of client-side compositing. The patent's title is "Apparatus and Method for *Client-Side Compositing* of Video Streams." (Ex. 17.) The abstract and summary describe the claimed invention as "an apparatus and method for *client-side compositing* of video streams." (*Id*. at 1:47-48.) The background section laments the disadvantages of "server-side compositing"

as opposed to the claimed "client-side compositing of media streams." (*Id*. at 1:8, 1:24-25; see *id*. at 1:7-43.) The specification further ties the advantages of the invention to client-side compositing as distinguished from server-side compositing:

> Example embodiments provide a method and apparatus that allows the user to have more control over the displaying of video images on a display screen. For example, embodiments of the present invention *composite at least one of the media data streams on a video display device as opposed to the video server*.

(*Id*. at 4:56-67.) And the phrase "client-side compositing of media streams" appears in every single claim. (*Id.* at 10:6, 10:44, 11:1, 11:48-49, 12:14-15, 12:33-34.) Thus, just as in *Poly-America*, "[r]eview of the entirety of the ['180] patent reveals that the preamble language relating to [client-side compositing] … discloses a fundamental characteristic of the claimed invention that is properly construed as a limitation of the claim itself." 383 F.3d at 1310.

WSOU's arguments are unavailing. First, that the claims do not rely on "client-side compositing of media streams" as an antecedent basis is not dispositive. (Dkt. 33 at 28.) As this Court recognizes, a preamble may be limiting regardless of antecedent basis "if the preamble recites additional structure or steps underscored as important by the specification." *Ancora Techs., Inc. v. LG Elecs.*, Inc., 2020 WL 4825716, at *6 (W.D. Tex. 2020). That is the case here.

Citing *Ancora*, WSOU argues that "'client-side compositing of media streams' merely expresses a purpose or intended use for the invention." (Dkt. 33 at 28-29.) But the present facts are materially different from *Ancora*. There, the court declined to construe the term "license" as limiting because "the claim body adequately addresses the use of a license record to verify a specific program." 2020 WL 4825716, at *7. In other words, the claim body expressly reused the term that appeared in the preamble. Here, by contrast, the claims do not reuse the term "client-side compositing" in the body of the claims.

WSOU also asserts that "it is unclear "how a finding that the disputed preamble phrase is limiting would affect claim scope, if at all." (Dkt. 33 at 29.) If WSOU expressly agrees that the claims require client-side as opposed to server-side compositing, Google will withdraw its request for construction of the preamble. WSOU, however, takes no position on the matter—WSOU either cannot or will not say whether it plans to argue that server-side compositing is covered by the claims. Either way, the '180 patent makes clear: client-side compositing is a fundamental—and limiting—characteristic of the claimed invention.

There is no merit to WSOU's suggestions that this requirement conflicts with the server-side focus of claim 7. Although directed to operations of the server, claim 7 recites a "method for client-side compositing of media streams" that generates a "multiplexed data stream to be displayed on the [client's] display screen according to the compositing-instruction substream." The '180 patent makes clear that the purpose of the "compositing-instruction substream" generated by the server is to enable "client-side compositing of media streams," as recited in the preamble of claim 7. (Ex. 17, 5:38-43) ("instead of compositing all the data streams at the video server 102, the video display device 103 composites and displays at least one of the media streams according to a compositing-instruction substream, which is generated at the video server"). Nothing in claim 7 suggests that the compositing would be done server-side.

B. "wherein the compositing-instruction substream indicating the area of the display screen to display the at least one media substream is an area to display one of the on screen display and a picture in picture" (claims 8 and 21)

Google's Construction	WSOU's Construction
indefinite	plain and ordinary meaning

Independent claims 7 and 20 are identical in relevant part and each recite that the "compositing-instruction substream" must include either (1) "instructions indicating an aspect

ratio of at least one media substream," or (2) "[instructions indicating] an area of a display screen to place an on screen display included in an on screen display substream." Dependent claims 8 and 21, also identical in relevant part, purport to narrow option (2), providing that "the compositing-instruction substream indicating the area of the display screen to display the at least one media substream is an area to display one of the on screen display and a picture in picture."

A straightforward analysis of the claim language shows that claims 8 and 21 cannot be reconciled with their independent claims. While claims 7 and 20 provide for "**instructions indicating . . . an area of a display screen to place an on screen display included in an on screen display substream**," claims 8 and 21 refer to "**the compositing-instruction substream indicating the area of the display screen to display the at least one media substream**." First, there is no antecedent basis for "**the area of the display screen to display the at least one media substream**" in the independent claim or in claims 8 and 21 themselves. See *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008) (term may be "indefinite if a term does not have proper antecedent basis where such basis is not otherwise present by implication or the meaning is not reasonably ascertainable"); *Bushnell Hawthorne, LLC v. Cisco Sys., Inc.*, 813 F. App'x 522, 526-27 (Fed. Cir. 2020) (claims indefinite when scope could not be reasonably ascertained given lack of antecedent basis).[5]

Second, the dependent claims require that "**the area of the display screen to display the at least one media substream** is an area to display **one of the on screen display** and **a picture in picture**." Assuming the mediastream "area" in claims 8 and 21 is the same as on screen

[5] The '180 patent makes clear that "at least one media substream" is broader than "an on screen display included in an on screen display substream," which is merely one type of media substream. (Ex. 17 at 5:11-14 ("A media stream may be any type of media stream *including but not limited* to audio/visual (A/V) streams, and text/graphic streams for On-Screen Displays (OSD).").

display "area" in claims 7 and 21, then claims 7 and 21 would require instructions indicating an area to place **an on screen display**, while claims 8 and 21 allow that area to be for **either an on screen display or a picture in picture**. Instructions identifying where to place a picture in picture would satisfy dependent claims 8 and 21 **but not** independent claims 7 and 20. That makes claims 8 and 21 broader than the claims from which they depend.

Section 112, ¶ 4 requires that a dependent claim "shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed." "A dependent claim that contradicts, rather than narrows, the claim from which it depends is invalid." *Multilayer Stretch Holdings, Inc. v. Berry Plastics Corp.*, 831 F.3d 1350, 1362 (Fed. Cir. 2016). In *Multilayer Stretch*, the court held a dependent claim indefinite because it included a particular material that the independent claim excluded. *Id.* So too here. Claims 8 and 21 are invalid because they include an option for the "compositing-instruction substream" that the independent claims exclude: instructions indicating "an area to display . . . a picture in picture."

IV. U.S. PATENT NO. 8,965,045 (CASE NO. 6:20-CV-574-ADA)

The '045 patent relates to an image capture apparatus for tracking a moving object. (Ex. 18 at Abstract.) The apparatus includes a display to present the tracked object and the surrounding scene. (*Id*. at 3:48-57, 10:8-16, 11:27-42.) If the tracked object nears an edge of the field of view, the apparatus provides an output that notifies the user to adjust the apparatus before the tracked object is lost. (*Id*. at 10:22-26, 12:17-21, 12:45-48.)

A. "pre-emptive user output" (all claims)

Google's Construction	WSOU's Construction
an output that facilitates a user action to redefine available pixels before the tracked object is lost	plain and ordinary meaning

The phrase "pre-emptive user output" must be construed according to its use in the '045 patent because it is not a term of art and does not have a well-understood meaning. While WSOU urges a "plain and ordinary meaning" construction, it does not even attempt to explain what that meaning is. In fact, WSOU cites no dictionaries that define the phrase "pre-emptive user output"—because none exist. And the phrase does not appear in any other U.S. patent or application. Instead, "pre-emptive user output" is a term coined by the inventors of the '045 patent. "[B]ecause the disputed term is a coined term … the question is whether the intrinsic evidence provides objective boundaries to the scope of the term." *Iridescent Networks, Inc. v. AT&T Mobility, LLC*, 933 F.3d 1345, 1353 (Fed. Cir. 2019). In such instances, "[w]ithout a customary meaning of a term within the art, the specification usually supplies the best context for deciphering claim meaning." *Honeywell Int'l Inc. v. Universal Avionics Sys. Corp.*, 488 F.3d 982, 991 (Fed. Cir. 2007). That is precisely the case here, as the inventors "repeatedly, consistently, and exclusively" explained that the "pre-emptive user output" is an output that facilitates a user action to redefine available pixels before the tracked object is lost. *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1303 (Fed. Cir. 2004).

"Where a claim term has no ordinary and customary meaning, a court must resort to the remaining intrinsic evidence—the written description and the prosecution history—to obtain the meaning of that term." *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1164 (Fed. Cir. 2004); *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc) ("[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term."). In doing so, courts "construe [terms] only as broadly as is provided for by the patent itself." *Goldenberg*, 373 F.3d at 1164. Adhering to

these principles, Google's construction reflects the inventors' own usage of the term "pre-emptive user output" throughout the '045 patent.

With reference to Figure 14, the '045 patent states that an "object of interest 30 is tracked by moving a sub-set of pixels 100 and *loss of tracking is prevented*, when the sub-set of pixels 102 approaches an edge of the set of available pixels 100, *by facilitating user re-definition of the set of available pixels 100*." (Ex. 18 at 12:29-33.) The patent then expressly explains what the "pre-emptive user output" is (shown in italics) and when it occurs (shown in bold):

> [T]he processor 4 provides a pre-emptive user output. This user output 110 facilitates user action that redefines the set of available pixels 100 that **preemptively, that is, before tracking of the object is lost.**

(*Id.* at 12:45-48.) In the same vein, the inventors further provide that:

> The processor 4 is configured to detect when the sub-set of pixels 102 approaches an edge … of the set of available pixels 104. The processor 4 is configured to provide, in response to that detection, *a pre-emptive user output 110 that facilitates or instigates user action that redefines the set of available pixels 100*.

(*Id.* at 10:22-26.) The inventors also made clear that the user output is "pre-emptive" because it prompts the user to redefine an available set of pixels *before* the tracked object is lost:

> A sub-set edge detection event occurs **when the sub-set of pixels 102 approaches that edge of the set of available pixels 100, that is, it is the event that triggers** *the pre-emptive user output 110 that facilitates redefinition of the set of available pixels 100 by the user*.

(*Id*. at 12:17-21 (italics showing explanation of the "pre-emptive user output," and bold showing when it occurs).) Indeed, the inventors continued to stress that a "user output 110 is provided pre-emptively *to avoid loss of tracking* when the sub-set of pixels 102 approaches an edge of the set of available pixels." (*Id.* at 11:27-29.)

Equally important, at no point does the '045 patent indicate or suggest that the "pre-emptive user output" is anything other than an output that facilitates a user action to redefine

available pixels before the tracked object is lost. And WSOU's brief does not identify any such evidence. Accordingly, absent an established meaning, the "applicant's use of those [claim] terms in the specification thus controls their scope." *Irdeto*, 383 F.3d at 1300.

Attempting to avoid any construction of the coined term, WSOU proffers a series of erroneous arguments. First, WSOU wrongly asserts that Google "unduly restricts" the "pre-emptive user output" by importing extraneous limitations into the claim. (Dkt. 33 at 31-32.) However, as explained above, Google's construction fully coheres with the applicants' own usage of the term throughout the specification. The law is well-settled that "claims are directed to the invention that is described in the specification; they do not have meaning removed from the context from which they arose." *Netword, LLC v. Centraal Corp.*, 242 F.3d 1347, 1352 (Fed. Cir. 2001); *Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010) ("Claim terms are not construed in a vacuum divorced from the specification."). That is particularly true where, as here, the term lacks an "established meaning" and therefore "cannot be construed broader than the disclosure in the specification." *Indacon, Inc. v. Facebook, Inc.*, 824 F.3d 1352, 1357 (Fed. Cir. 2016).

Second, WSOU offers a self-defeating claim differentiation argument, comparing Google's construction with dependent claim 19. (Dkt. 33 at 38.) The Federal Circuit "decline[s] to apply the doctrine of claim differentiation where the claims are not otherwise identical in scope." *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1238 (Fed. Cir. 2016). Even WSOU admits that Google's construction (at a minimum) "slightly differs" from the dependent claim 19. (Dkt. 33 at 38.) Claim differentiation thus offers no basis for disturbing Google's construction. Moreover, claim differentiation "is not a hard and fast rule," *GPNE Corp. v. Apple Inc.*, 830 F.3d

1365, 1371 (Fed. Cir. 2016), and "it cannot enlarge the meaning of a claim beyond that which is supported by the patent documents." *Indacon*, 824 F.3d at 1358.

Third, contrary to WSOU's assertions, Google's construction does not rewrite the claims. Rather, it gives meaning to the claim language. WSOU recognizes that the statement "before the tracked object is lost" in Google's construction is a "clarification" of the word "pre-emptively." (Dkt. 33 at 33.) That is the precise role of claim construction: "Claim construction is for the purpose of explaining and defining terms in the claims, and usually requires use of words other than the words that are being defined." *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1360 (Fed. Cir. 2008). Further, the inventors explicitly defined "pre-emptive" to mean "before the object is lost" by using the definitional phrase "that is" in the statement that "preemptively, *that is*, before tracking of the object is lost." (Ex. 18 at 12:47-48.) The Federal Circuit makes clear that "[t]he usage 'i.e.' ('id est or 'that is') signals an intent to define the word to which it refers." *TF3 Ltd. v. Tre Milano, LLC*, 894 F.3d 1366, 1372 (Fed. Cir. 2018); *Trading Techs. Int'l, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1353 (Fed. Cir. 2010) ("The inventors acted as their own lexicographers and defined the word 'static:' 'The values in the price column are static; *that is*, they do not normally change positions unless a re-centering command is received.'").

B. "processor configured to provide a pre-emptive user output when the sub-set of pixels approaches an edge of the set of available pixels" (claim 1)

Google's Construction	WSOU's Construction
Subject to 35 U.S.C. § 112, ¶ 6, and indefinite for lack of corresponding structure	plain and ordinary meaning; not subject Section 112, ¶ 6

For this term, there are two issues: (i) does the phrase "processor configured to" invoke Section 112, ¶ 6; and (ii) is the term indefinite because the '045 patent fails to disclose structure for "provid[ing] a pre-emptive user output…." WSOU only addresses the first issue, and has forfeited any argument on the second.

On the first issue, WSOU's argument hinges on the erroneous premise that there is a categorical rule that the term "processor" avoids means-plus-function treatment. (Dkt. 33 at 35-36.) This Court and other districts make clear that whether the term "processor" invokes Section 112, ¶ 6 requires a case-specific analysis. *See Dyfan*, 6:19-cv-179-ADA, Dkt. 57 at 20 & n.4; *St. Isidore Research, LLC v. Comerica Inc.*, 2016 WL 4988246, at *14 (E.D. Tex. 2016) (construing "processor configured to" as a means-plus-function limitation because the processor "is defined only by the function that it performs"). As this Court instructs, applicants cannot "simply recite two nonce words—'processor' and 'code'—together in order to essentially write the claim in a means-plus-function format without being subject to § 112, ¶ 6." *Dyfan*, Dkt. 57 at 20 n.4.

The intrinsic record demonstrates that the phrase "processor configured to" in claim 1 fails to connote sufficient structure to perform the recited functions. First, claim 1 is drafted in the same format as means-plus-function claims with the phrase "processor configured to" substituted for the phrase "means for." The claim language following the phrase "processor configured for" is purely functional, including the function of "provid[ing] a pre-emptive user output." *See Joao Control & Monitoring Sys., LLC v. Protect Am., Inc.*, No. 1-14-cv-134-LY, 2015 WL 4937464, at *9 (W.D. Tex. Aug. 18, 2015) (construing "processing device" as a means-plus-function term because the claim "employs purely functional claiming without reciting sufficient structure in the claims to perform the function described"). Accordingly, the "processor configured to" phrase "does not provide any indication of structure because it sets forth the same black box recitation of structure for providing the same specified function as if the term 'means' had been used." *Williamson*, 792 F.3d at 1349.

Second, the specification does not describe any structural detail for a "processor." Rather, the specification uses the term "processor" as a generic placeholder for performing

various functions. (*See, e.g.*, Ex. 18 at Abstract; 1:18-28; 2:37-45; 5:26-29; 9:25-31; 10:20-25; 11:8-10; 12:36-61.) The specification also shows a processor as a black-box devoid of any structural details. (*Id*. at Figs. 1-4; Fig. 15a; 2:37-45; 13:16-21.) Such disclosure cannot avoid Section 112, ¶ 6 because it "amount[s] to generic terms or black box recitations of structure or abstractions." *Egenera*, 972 F.3d at 1373. Moreover, "even assuming" that a processor "connotes some possible structure in the general sense," that does not "amount[] to sufficient structure for performing the [claimed] function." *Id*. at 1374.

Given that the "processor configured to" phrase invokes Section 112, ¶ 6, this term is indefinite because the '045 patent fails to provide structure for performing the claimed function. Instead, the specification simply repeats the claimed function, but it does not provide any algorithm or other structure for carrying out that function. (Ex. 18 at 10:20-25; 10:56-62; 12:45-48; Fig. 14.) "This type of purely functional language, which simply restates the function associated with the means-plus-function limitation, is insufficient to provide the required corresponding structure." *Noah*, 675 F.3d at 1317. Tellingly, WSOU itself cannot identify any structure for performing the claimed function.

Finally, WSOU argues that Google somehow concedes that a "processor configured to" is structural because Google does not address the antecedent reference recited in the earlier limitations of claim 1. (Dkt. 33 at 35.) That argument is meritless. Given the limit on disputed terms, Google selected this term rather than an antecedent term. The analysis and outcome remains the same, and applies with equal force to the preceding limitations in claim 1.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that on February 12, 2021, I served the foregoing by electronic mail on counsel of record.

/s/ *Edwin Garcia*
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